

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,172,991 B2
APPLICATION NO. : 09/976877
DATED : February 6, 2007
INVENTOR(S) : Anderson et al.

Page 1 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 5 (line 34), delete "R1 and R2" and insert therefor --R¹ and R²--.

Col. 8 (line 62), delete "R3" and insert therefor --R³--.

Col. 8 (line 62), delete "aryl, aryl," and insert therefor --aryl,--.

Col. 8 (line 63), delete "R4 and R5" and insert therefor --R⁴ and R⁵--.

Col. 8 (line 65), delete "R6 through R13" and insert therefor --R⁶ through R¹³--.

Col. 8 (line 66), delete "alkyl aryl," and insert therefor --alkyl, aryl,--.

Col. 8 (line 66), delete "R6" and insert therefor --R⁶--.

Col. 8 (line 67), delete "R9" and insert therefor --R⁹--.

Col. 8 (line 67), delete "R10 through R13" and insert therefor --R¹⁰ through R¹³--.

Col. 8 (line 67), delete "R10" and insert therefor --R¹⁰--.

Col. 9 (line 1), delete "R13" and insert therefor --R¹³--.

Col. 9 (line 1), delete "R1 and R2" and insert therefor --R¹ and R²--.

Col. 9 (line 4), delete "CR'R'" and insert therefor --CR'R"--.

Col. 9 (line 48), delete "R1 through R6" and insert therefor --R¹ through R⁶--.

Col. 9 (line 50), delete "N-R7, wherein R7" and insert therefor --N-R⁷, wherein R⁷--.

Col. 9 (line 66), delete "R1 and R2" and insert therefor --R¹ and R²--.

Col. 10 (line 1), delete "N-R7, wherein R7" and insert therefor --N-R⁷, wherein R⁷--.

Col. 10 (line 2), delete "R3 and R4" and insert therefor --R³ and R⁴--.

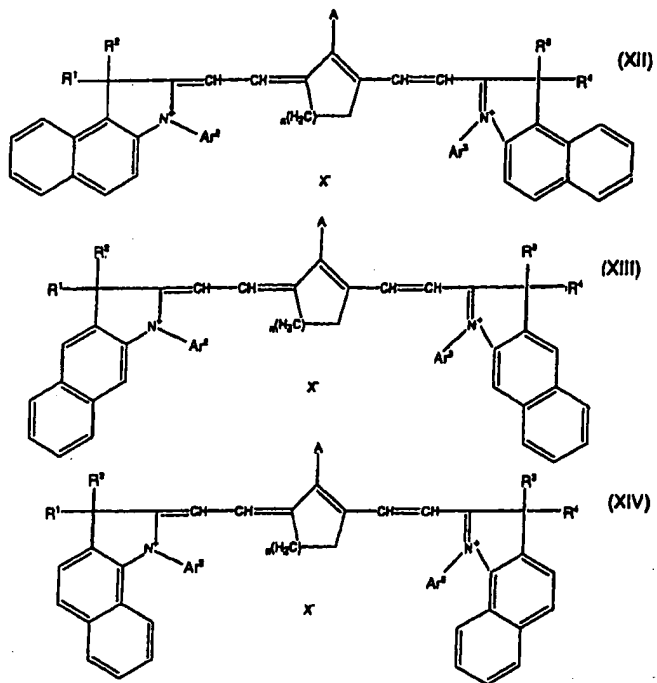
UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,172,991 B2
 APPLICATION NO. : 09/976877
 DATED : February 6, 2007
 INVENTOR(S) : Anderson et al.

Page 2 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 10, Structures (XII), (XIII), and (XIV): delete the entire structures (XII), (XIII), and (XIV) and replace them with the following structures (XII), (XIII), and (XIV):

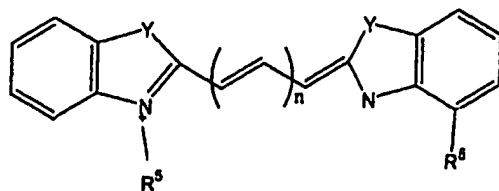


Col. 10 (line 45), delete "R1-R4" and insert therefor --R¹-R⁴--.

Col. 10 (line 47), delete "Ar2 and Ar3" and insert therefor --Ar² and Ar³--.

Col. 12, Formula (XX): delete the entire formula (XX) and replace it with the following formula (XX):

(XX)



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,172,991 B2
APPLICATION NO. : 09/976877
DATED : February 6, 2007
INVENTOR(S) : Anderson et al.

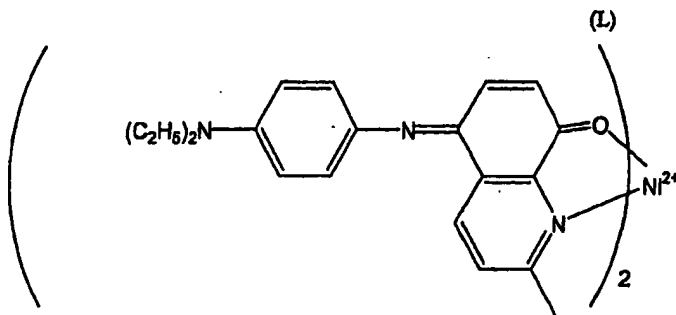
Page 3 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 12 (line 66), delete "R5" and insert therefor --R⁵--.

Col. 12 (line 67), delete "N-CH₃, C(CH₃)₂," and insert therefor --N-CH₃, C(CH₃)₂--.

Col. 19, Structure (L): delete the entire structure (L) and replace it with the following structure (L):



In the Claims

Col. 22 (line 22), after "materials", delete "selected from".

Col. 22 (line 23), after "ing", delete "at least one of the group consisting of".

Col. 22 (line 24), after "absorbing", delete "heat sensitive".

Col. 22 (line 47), delete "xan-".

Col. 22 (line 48), delete "thene compounds,".

Col. 22 (line 55), delete "3-methyl-2,2-spirobi(benzo-f-chrome)," and insert therefor --3-methyl-2,2'-spirobi(benzo-f-chrome),--.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

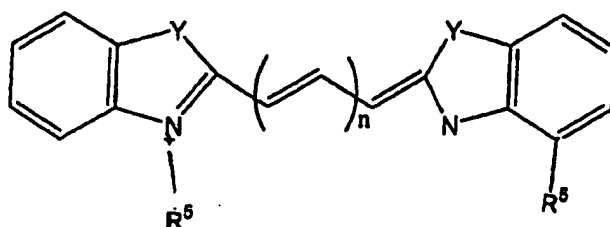
PATENT NO. : 7,172,991 B2
APPLICATION NO. : 09/976877
DATED : February 6, 2007
INVENTOR(S) : Anderson et al.

Page 4 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 23, Formula (XX): delete the entire formula (XX) and replace it with the following formula (XX):

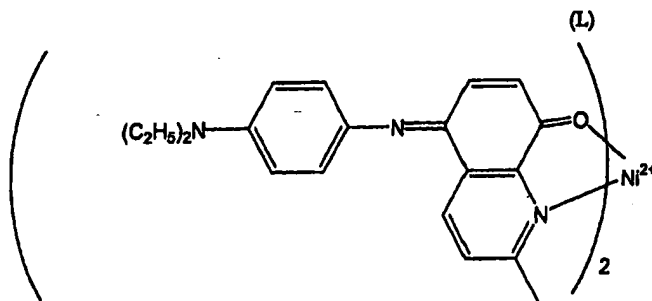
(XX)



Col. 23 (line 25), delete "R5" and insert therefor $-R^5-$.

Col. 23 (line 26), delete "N-CH₃, C(CH₃)₂," and insert therefor $-N-CH_3$, $C(CH_3)_2-$.

Col. 29, Structure (L): delete the entire structure (L) and replace it with the following structure (L):



Col. 29 (line 53), delete "R₁R₂N-substituent" and insert therefor $-R^1R^2N-$ substituent--.

Col. 29 (line 55), delete "R₁ and R₂" and insert therefor $-R^1$ and R^2- .

Col. 30 (line 49), delete "R₁ and R₂" and insert therefor $-R^1$ and R^2- .

Col. 32 (line 19), delete "X, X₁, X₂ and R₁" and insert therefor $-X$, X^1 , X^2 and R^1- .

Col. 32 (line 20), delete "R₆" and insert therefor $-R^6-$.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,172,991 B2
APPLICATION NO. : 09/976877
DATED : February 6, 2007
INVENTOR(S) : Anderson et al.

Page 5 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 32 (line 20), delete "(C):" and insert therefor --c)--.

Col. 32 (line 21), delete "R4" and insert therefor --R⁴--.

Col. 32 (line 26), delete "R4" and insert therefor --R⁴--.

Col. 32 (line 27), delete "R7 and R8" and insert therefor --R⁷ and R⁸--.

Col. 32 (line 28), delete "R7" and insert therefor --R⁷--.

Col. 32 (line 29), delete "R8" and insert therefor --R⁸--.

Col. 32 (line 31), delete "C₂H₄- bond," and insert therefor --C₂H₄- bond,--.

Col. 33 (line 19), delete "X, X₁, X₂ and R₁" and insert therefor --X, X¹, X² and R¹--.

Col. 33 (line 20), delete "R₆" and insert therefor --R⁶--.

Col. 33 (line 22), delete "OH₃;" and insert therefor --CH₃;--.

Col. 33 (line 32), delete "R2, R4," and insert therefor --R², R⁴,--.

Col. 33, delete chemical structures III and IV.

Col. 34 (line 16), delete "R4" and insert therefor --R⁴--.

Col. 34 (line 18), delete "R2 and R4" and insert therefor --R² and R⁴--.

Col. 34 (line 20), delete "feast" and insert therefor --least--.

Col. 34 (line 36), delete "comprising".

Col. 34 (line 66), delete "aryl, aryl," and insert therefor --aryl,--.

Col. 34 (line 67), delete "R4" and insert therefor --R⁴--.

Col. 35 (line 2), delete "R13" and insert therefor --R¹³--.

Col. 35 (line 3), delete "R6" and insert therefor --R⁶--.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,172,991 B2
APPLICATION NO. : 09/976877
DATED : February 6, 2007
INVENTOR(S) : Anderson et al.

Page 6 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 35 (line 4), delete "R9" and insert therefor --R⁹--.

Col. 35 (line 4), delete "R10 through R13" and insert therefor --R¹⁰ through R¹³--.

Col. 35 (line 4), at the end of the line delete "R10" and insert therefor --R¹⁰--.

Col. 35 (line 5), delete "R13" and insert therefor --R¹³--.

Col. 35 (line 5), delete "R1 and R2" and insert therefor --R¹ and R²--.

Col. 35 (line 8), delete "CR'R'" and insert therefor --CR'R"--.

Col. 35 (line 33), delete "R8" and insert therefor --R⁸--.

Col. 35 (line 64), delete "R1 through R6" and insert therefor --R¹ through R⁶--.

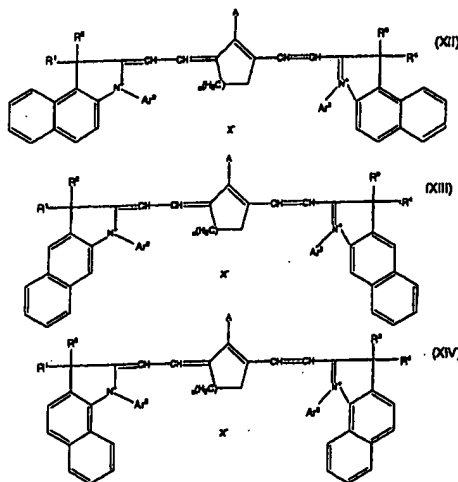
Col. 35 (line 66), delete "N-R7, wherein R7" and insert therefor --N-R⁷, wherein R⁷--.

Col. 36 (line 1), delete "R1 and R2" and insert therefor --R¹ and R²--.

Col. 36 (line 3), delete "N-R7, wherein R7" and insert therefor --N-R⁷, wherein R⁷--.

Col. 36 (line 4), delete "R3 and R4" and insert therefor --of R³ and R⁴--.

Col. 36, Structures (XII), (XIII), and (XIV): delete the entire structures (XII), (XIII), and (XIV) and replace them with the following structures (XII), (XIII), and (XIV):



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,172,991 B2
APPLICATION NO. : 09/976877
DATED : February 6, 2007
INVENTOR(S) : Anderson et al.

Page 7 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

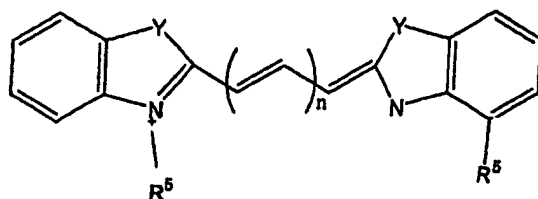
Col. 36 (line 40), delete "R1-R4" and insert therefor --R¹-R⁴--.

Col. 36 (line 42), delete "Ar2 and Ar3" and insert therefor --Ar² and Ar³--.

Col. 37 (line 23), after "area", delete "is".

Col. 38, Formula (XX): delete the entire formula (XX) and replace it with the following formula (XX):

(XX)



Col. 38 (line 20), delete "R5" and insert therefor --R⁵--.

Col. 38 (line 21), delete "N-CH₃, C(CH₃)₂," and insert therefor --N-CH₃, C(CH₃)₂--.

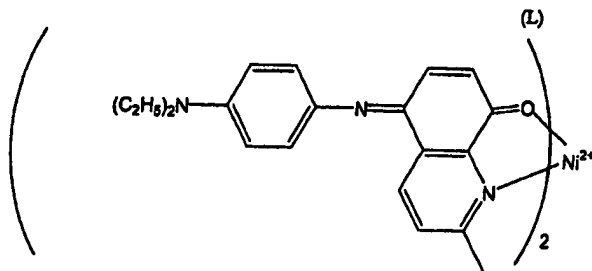
Col. 38 (line 32), delete "of." and insert therefor --of:--.

Col. 38 (line 55), delete "of" and insert therefor --of:--.

Col. 40 (line 2), delete "of" and insert therefor --of:--.

Col. 40 (line 26), delete "of" and insert therefor --of:--.

Col. 45, Structure (L): delete the entire structure (L) and replace it with the following structure (L):



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,172,991 B2
APPLICATION NO. : 09/976877
DATED : February 6, 2007
INVENTOR(S) : Anderson et al.

Page 8 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 45 (line 32), delete "R1R2N-substituent" and insert therefor --R¹R²N-substituent--.

Col. 45 (line 34), delete "R1 and R2" and insert therefor --R¹ and R²--.

Col. 45 (line 45), delete "R1 and R2" and insert therefor --R¹ and R²--.

Col. 47 (line 39), delete "X, X1, X2 and R1" and insert therefor --X, X¹, X² and R¹--.

Col. 47 (line 40), delete "(C):" and insert therefor --c):--.

Col. 47 (line 48), delete "C1-C10" and insert therefor --C1-C8--.

Col. 48 (line 34), delete "X, X₁, X₂ and R₁" and insert therefor --X, X¹, X² and R¹--.

Col. 48 (line 35), delete "R₆" and insert therefor --R⁶--.

Col. 48 (line 37), delete "OH₃;" and insert therefor --CH₃;--.

Col. 49 (line 51), delete "R3" and insert therefor --R³--.

Col. 49 (line 51), delete "aryl, aryl," and insert therefor --aryl,--.

Col. 49 (line 52), delete "R4 and R5" and insert therefor --R⁴ and R⁵--.

Col. 49 (line 54), delete "R6 through R13" and insert therefor --R⁶ through R¹³--.

Col. 49 (line 55), delete "R6" and insert therefor --R⁶--.

Col. 49 (line 56), delete "R9" and insert therefor --R⁹--.

Col. 49 (line 56), delete "R10 through R13" and insert therefor --R¹⁰ through R¹³--.

Col. 49 (line 56), at the end of the line delete "R10" and insert therefor --R¹⁰--.

Col. 49 (line 57), delete "R13" and insert therefor --R¹³--.

Col. 49 (line 57), delete "R1 and R2" and insert therefor --R¹ and R²--.

Col. 49 (line 60), delete "CR'R'" and insert therefor --CR'R"--.

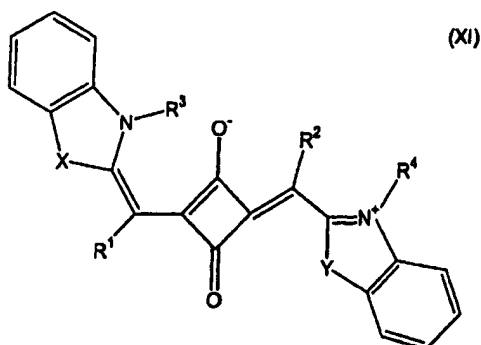
UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,172,991 B2
APPLICATION NO. : 09/976877
DATED : February 6, 2007
INVENTOR(S) : Anderson et al.

Page 9 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 50, before line 35, insert the following structure:



Col. 50 (line 35), delete "R1 through R6" and insert therefor --R¹ through R⁶--.

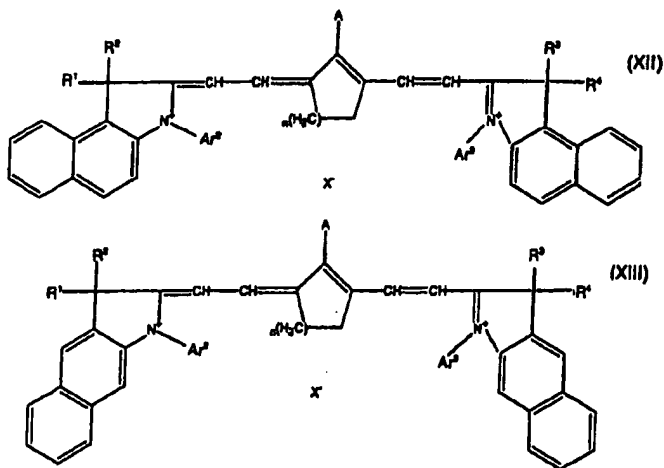
Col. 50 (line 37), delete "N-R7, wherein R7" and insert therefor --N-R⁷, wherein R⁷--.

Col. 50 (line 39), delete "R1 and R2" and insert therefor --R¹ and R²--.

Col. 50 (line 41), delete "N-R7, wherein R7" and insert therefor --N-R⁷, wherein R⁷--.

Col. 50 (line 42), delete "R3 and R4" and insert therefor --R³ and R⁴--.

Col. 50, Structures (XII) and (XIII): delete the entire structures (XII) and (XIII) and replace them with the following structures (XII) and (XIII):



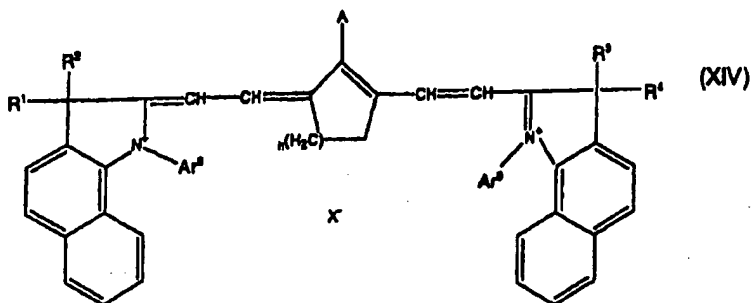
UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,172,991 B2
APPLICATION NO. : 09/976877
DATED : February 6, 2007
INVENTOR(S) : Anderson et al.

Page 10 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 51 (line 1), delete the entire structure (XIV) and replace it with the following structure (XIV):



Col. 51 (line 15), delete "R1-R4" and insert therefor --R¹-R⁴--.

Col. 51 (line 17), delete "Ar2 and Ar3" and insert therefor --Ar² and Ar³--.

Signed and Sealed this

Sixth Day of May, 2008

JON W. DUDAS
Director of the United States Patent and Trademark Office